**“CHALLENGENS IN LIVE STOCK MANAGEMENT”**

**A Research Report on Social and Rural Issues**

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**CHAPTER 1**

**INDRODUCTION**

Livestock management entails managing cattle and supervising farm workers. Livestock management calls for knowledge of animal technology and animal husbandry, in addition to accurate commercial enterprise sense. Many livestock managers have to additionally maintain economic information for his or her operations.

Livestock management is the rearing of cattle for milk, meat and agricultural purposes. Animal Husbandry has great influence on the economic status of the farmers, in turn it places an important role in rural economy. The main occupation of majority of rural population in the Tumkur district.

Animal Husbandry has great influence on the economic status of the farmers, in turn it places an important role in rural economy. The main occupation of majority of rural population in the district is Agriculture and its allied activities. Agriculture activities are predominantly dependent on drought power provided by animal husbandry sector. Today animal husbandry activities are not just subsidiary to Agriculture. But they have been growing enormously and can conveniently be called an industry. In this regard the department of Animal Husbandry and Veterinary Services plays a key role. In giving healthcare to ailing animals and birds. Conducting vaccination programmed to contain the diseases, which in turn also protects human population from Zoonotic diseases. (diseases transmitted from animals to man) Department plays a vital role in production of clean, hygienic milk and meat. Carrying out Artificial Insemination Programmed for getting better milk yield and progeny. Implementing several socioeconomic programmed through various extension activities.

This sector provides livelihood to more than two-thirds of the rural population. India has the largest animal husbandry sector and contributes 18.6 percent to the total milk production of the world.

Animal illness management is inadequate due to a lack of feed resources, lack in veterinary service. It provides employment to about 8.8 % of the population in India. India has vast livestock resources; Livestock sector contributes 4.11% GDP and 25.6% of total Agriculture GDP.

Data collected in Tumkur rural areas.

**Abstract**

This study investigates the challenges faced by livestock farmers in the Tumkur district of Karnataka, India, focusing on disease management, feeding practices, and government support for animal husbandry. The research highlights the vital role of livestock in rural economies and underscores the need for effective livestock management practices. Data were collected from 50 livestock farmers through a structured questionnaire, revealing that 76% engage in cattle farming and face significant challenges related to disease management, with 58% identifying difficulties in diagnosing diseases. Environmental issues, particularly water usage and pollution, were noted by 78% of respondents, while 74% reported obstacles in marketing and distribution of animal products.

The findings suggest a lack of sufficient veterinary support, as indicated by 56% of the participants, which impacts disease control and overall livestock health. Furthermore, 62% of farmers benefit from government animal insurance schemes, yet the necessity for improved veterinary services and better training opportunities in modern husbandry practices remains critical.

The study concludes that enhancing nutrition, veterinary care, and government support could significantly improve sustainability and productivity in animal husbandry. It emphasizes the need for local agencies to implement effective training programs and ensure access to veterinary services, which are vital for advancing livestock management practices. Overall, the Indian livestock sector holds considerable potential for growth, necessitating a comprehensive approach to tackle existing challenges for a sustainable future in animal husbandry.

**LITERATURE VIEW**

**1.A STUDY ON KNOWLEDGE AND ADOPTION BEHAVIOUR OF LIVESTOCK FARMERS**

AUTHORS: K. Satyanarayana, V. Mahadeshwar

Presently India has a huge population of 485 million livestock and 489 million poultry population, holding the second highest position in cattle strength. It possesses the highest strength of buffaloes, third highest number of sheep, holds second highest position in goat population, fifth highest number of chicken (Basic Animal Husbandry Statistics, 2003)

Objectives:

* To study the socio-economic and psychological characteristics of the livestock farmers.
* The knowledge level of recommended livestock management practices, the extent of adoption of recommended livestock management practices and to explore the association between personal, economic and socio -psychological characters of farmers and the extent of adoption of improved livestock management practices

This research conducted research design; the present study was conducted in Bangalore North taluka. In this taluka Haniyuru village was purposively selected being the adopted village of Veterinary College, Bangalore, Karnataka Veterinary Animal and Fisheries Sciences University. Data were collected from a total of 100 farmers selected randomly from the village

**SOCIO-ECONOMIC AND PSYCHOLOGICAL CHARACTERISTICS OF THE LIVESTOCK FARMERS:**

From this research observed that 1 that more than half (68.00%) of the livestock farmers lived in nuclear type family and three fourths (76.00%) of the livestock farmers belonged to small family size category

 that more than half of the farmers (51.00%) had membership in cooperative societies and the possible reason could be cattle being one of the major livestock reared, most of them would have been members of cooperative societies.

Further it was found that majority (79.00%) of the respondents belonged to low family income. So, efforts should be made to strengthen the livestock keeping occupation, increasing the livestock farmers awareness of scientific practices and improving their risk-taking ability so that their income from livestock activities is raised further.

**Milk Production details of livestock and interested livestock activity of the farmers for expansion:**

revealed low production level (90.00%), low consumption of milk (96.00%), followed by low sale (91.00%). This may be attributed to the lesser number of crossbred cattle holding (45.00%) found in the study area. majority of the farmers had interest in expanding their dairy enterprise (70.00%). The probable reason for the above trend may be that the farmers might have felt dairy and sheep farming to be more remunerative.

**KNOWLEDGE LEVEL OF RECOMMENDED LIVESTOCK MANAGEMENT PRACTICES AMONG THE LIVESTOCK FARMERS:** Majority of the farmers owned dairy animals and considered it as a remunerative enterprise and this could be attributed to the medium knowledge possessed by them.

Association between personal, economic and socio -psychological characters of farmers and the knowledge and the extent of adoption of improved Sheep and Goat management practices.

Association between personal, economic and socio -psychological characters of farmers and the knowledge and the extent of adoption of improved Poultry management practices

Results revealed that variables like family type and family size were highly significant to both knowledge and extent of adoption which indicates that though their family type was nuclear and family size was small their interest and extent of remuneration could be the reasons for a significant relationship with knowledge and extent of adoption

**2. Role of veterinary officers in management of livestock during flood**

**AUTHORS**: ANITHA. M, V. JAGADEESWARY, K. SATYANARAYAN, WILFRED RUBAN, H. S. MADHUSUDHAN, Y. MADHURA AND J. SHILPA SHREE

India is the second most flood-affected country after Bangladesh. Karnataka has experienced severe floods earlier also during the last two decades. Keeping the above in view, there is a need to understand the effect of flood on livestock production. The data collection was done during the month of November and December 2021by personal interview method with the help of a pretested schedule in two divisions of north Karnataka with 160respondents each making a total of 320 respondents.

Livestock is one of the fastest growing agricultural subsectors in developing countries. It also provides employment to about 8.8 per cent of the population in India (Basic animal husbandry statistics, 2018-19). Livestock sector contributes to an extent of 4.11 per cent to the total GDP and 25.60 per cent of total Agriculture GDP (Livestock census 20th, 2019) of the country.

The study was conducted purposively in Belagavi and Kalaburgi division of Karnataka. Belagavi division comprises the districts of Bagalkot, Belagavi, Bijapur, Dharvad, Gadag, Haveri and Uttara kannada. Kalaburgi division comprised the districts namely Ballary, Bidar, Kalaburgi,Koppal,Raichur, Yadgiri and Vijayanagar. d random sampling techniques were followed for selecting the respondents for the study. The divisions, districts and taluks were selected purposively whereas random sampling technique was adopted in selection of villages and respondents.

**Preparatory measures and managemental measures adopted during flood**: It was observed from the Table 3 that, from Belagavi division the majority of veterinary officers have adopted medium precautionary measures (80.00%), followed by low (15.00%) and high level of precautionary measures (5.00%). Similarly, in Kalaburgi division, about 75.00 per cent of respondents have adopted medium level of precautionary measures followed by low (20.00%) and high level of precautionary measures (5.00%). Among the total respondents about 77.50 per cent of respondents have adopted medium level of precautionary measures followed by low (17.50%) and high level of precautionary measures (5%). This could be due to the fact that most of the Veterinary Officers identified the temporary shelter place for the livestock and also storage of feed and fodder to the livestock and also storage of emergency medicines to treat the animals.

**Constraints faced by Veterinary Officers during the flood:**

* In Belagavi division the first and fore most constraint faced by Veterinary Officers was outbreak of different contagious diseases.
* second constraint was isolation of sick and healthy animals.
* Lack of adequate staff.
* Distribution of feed and fodder among the livestock farmers in temporary shelter area and proper disposal of carcass during the flood was ranked as the fifth constraint.
* lack of transportation facilities to veterinarians.
* lack of training facilities regarding the proper planning and management of livestock during flood was ranked as seventh constraint.
* It was difficulties in communication with other staff or official located in distant areas (MS 28.40) and improper storage facilities for medicines and vaccines.
* Difficulty in identification of missing animals was ranked as last constraint faced by Veterinary Officers

The present study entitled “Role of veterinary officers in management of livestock during flood and constraints faced by them during flood” revealed that the majority of the veterinary officers were middle aged(45.00%), 67.50 per cent. majority of the veterinary officers got information two days prior the occurrence of flood (47.50%) and majority of the Table 4: Constraints faced by Veterinary Officers during flood.

The findings would help in arranging awareness camps in villages and training programmes to different stake holders for strengthening the managemental measures to be taken during the flood.

3. **EFFECT OF CLIMATE CHANGE ON AGRICULTURE AND LIVESTOCK AS PERCEIVED BY THE FARMERS OF KARNATAKA:**

**AUTHORS:** Nagaratna Biradar , S.L. Patil , T.H. Gajendra and L.

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A study was conducted in 2010-11 in Karnataka to understand the farmers’ perception of climate change on agriculture and livestock practices. Pre tested and standardized interview schedule was administered to 150 farmers of 10 villages of 2 districts of Karnataka belonging to above 45 years of age.

Climate change is the most serious environmental threat of the 21st century. The effect of global climatic change on agriculture has recently become a subject of global importance. Climate constitutes complex inter-related variables such as temperature, rainfall, wind speed and sun shine, having varied role to play. Change in one variable triggers changes in other. In Indian context, the rainfall is highly variable with greater spatial variability across region and season.

The study was conducted in 2010-11 in two agro climatic zones of northern Karnataka viz., northern transitional zone and northern dry zone. One district each from these zones was selected for the study. Dharwad district from northern transitional zone and Bijapur , northern dry zone were selected. Effect of climate change as perceived by the respondents in last two decades was studied separately for crop husbandry and livestock practices. Twenty eight farming practices beginning with the land preparation to post harvest operations of crop husbandry covering grains and crop residues, were enlisted. Effect of climate on each of these practices were sought as positive, negative and no effect.

**1 Effects of climate change on agriculture as perceived by farmers in the last two decades:**

Application of fertilizer in relation to soil and air temperatures is important because these conditions affect plant growth and hence nutrient use. Change in climate, however, brought shift in time of application of fertilizer resulting in perceived negative impact.

Ninety or more than ninety per cent of the respondents expressed negative impacts of climate change on weed growth (98%), harvesting (98%), grain yield (98%), shelf life of the crop (98%), crops grown (96.67%), quality of grain yield (93.33%), cropping pattern (92%), spacing (92%), insect and pest infestation (92%), land preparation (90%), soil fertility (90%), use of chemical fertilizer (90%) and disease infestation (90%).

**2.Effects of climate change on livestock as perceived by farmers in the last two decades:**

Negative effects of climate change on livestock as experienced by more than 90.00 percent.More than 80 per cent of the respondents have observed negative impacts on quantity of concentrate feeds, quality of dry fodder, utilization of dry fodder, method of rearing livestock and purpose of rearing livestock. In case of price of milk and livestock, farmers observed positive effects. But in true sense when compared with the cost of milk production the respondents’ perception of positive effect on price of milk needs further analysis.

Farmers observed mainly negative changes on several crop production and animal husbandry practices due to changes in climate in the last two decades. It is therefore essential to educate farmers to adopt climate resilient technologies of appropriate varieties selection, change in cropping pattern, choice of crop, timing of irrigation, application of chemical fertilizers etc. Similarly they have to be educated on livestock species mix including drought resistant breeds and livestock management practices so as to counter adverse impact of rising temperature and reduced precipitation.

**OBJECTIVES**

* To identify problem faced in animal husbandry.
* To evaluate current condition and practices in animal husbandry.
* To examine different feeding and nutritional requirements to enhance animal growth.

**PROBLEM STATEMENT**

The livestock industry faces numerous challenges, including disease control, feed quality and availability, environmental impact, and technological advancements. Addressing these challenges is crucial for optimizing livestock production, improving animal welfare of animals.

**CHAPTER 2**

**RESEARCH METHODOLOGY**

* **Sources of Data:** The primary data is collected through preparing questionnaire in google form and circulated to the farmers who are practicing Organic farming. And secondary source of information collected from reputed journals and internet sources.
* **Population:** Livestock farmers in Tumkur areas
* **Sample size:** The data is collected from 50 respondents.
* **Sampling method:** Sampling method used for this study is Convenience sampling.
* **Data analysis:** Data analysis is done through Excel software.
* **Tools of analysis:**
* Graphical representation
* Table diagram

**CHAPTER 3**

**DATA ANALYSIS AND INTERPRETATION**

**4.From how many years you are engaging in Animal husbandry?**



From above graph we can see that the majority of people involve in livestock management since, 25 years.

**5.What is the primary species of livestock you are involved with?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **particulars** | **No of response** | **percentage** |
| 1 | a) cattle | 38 | 76% |
| 2 | b) poultry | 12 | 24% |
| 3 | c)swine | 0 | 0 |
|  | Total | 50 | 100% |

|  |  |
| --- | --- |
| mean | 20.66667 |
| Standard deviation | 19.21805 |

From above table and pie chart shows that 76% of the people are engage in cattle animal husbandry and 24% are in the poultry farm.

**6**.What is one of the primary challenges in animal husbandry related to animal health?

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **particulars** | **frequency** | **percentage** |
| 1 | a) Disease management | 29 | 58% |
| 2 | b) Breeding techniques | 2 | 4% |
| 3 | c) Feed quality | 10 | 20% |
| 4 | d) Environmental factors | 9 | 18% |
| Total |  | 50 |  |

|  |  |
| --- | --- |
| mean | 24.75 |
| Standard deviation | 14.17451 |

From above it shows people face 38% problem in disease management 20% of problem in feed quality 18% problem depends on environmental factors 4% in breeding techniques so, most of people face challenge in disease management in cattle animals a poultry farm. From above pie chart and table, it shows people face 38% problem in disease management 20% of problem in feed quality 18% problem depends on environmental factors 4% in breeding techniques so, most of people face challenge in disease management in cattle animals a poultry farm.

7.What do you find most challenging in disease management?

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **particulars** | **No of response** | **percentage** |
| 1 | a) Identifying and diagnosing diseases | 27 | 58% |
| 2 | b) Access to affordable veterinary care and medications | 14 | 4% |
| 3 | c) Implementing biosecurity measure | 7 | 20% |
| 4 | d) Dealing with antibiotic resistance | 2 | 18% |
|  | Total | 50 | 100% |

|  |  |
| --- | --- |
| mean | 21 |
| Standard deviation | 9.20145 |

From the above table shows that 58% of people face problem in Identifying and diagnosing diseases, 20% problem in Implementing biosecurity measure,18% of people face problem in dealing with antibiotic resistance only 4% people face problem in Access to affordable veterinary care and medications.

From the above pie chart it shows that 27 people majorly face problem in Identifying and diagnosing diseases.

8.Which environmental aspect do you consider most challenging?

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **particulars** | **frequency** | **percentage** |
| 1 | a) Waste management (e.g., manure disposal) | 8 | 16% |
| 2 | b) Water usage and pollution | 39 | 78% |
| 3 | c)Greenhouse gas emissions | 3 | 6% |
| Total |  | 50 |  |

|  |  |
| --- | --- |
| mean | 31.6667 |
| Standard deviation | 40.129 |

From above table it shows that the 78% people faced problem by water and usage and 16% of face problem in Waste management and 6% of face problem in Greenhouse gas emissions.

Finally, majority of people face problem in water usage and pollution.

9.Which government programs or initiatives have been implemented to support animal husbandry in villages?

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **particulars**  | **frequency** | **percentage** |
| 1 | a)Animal insurance schemes | 31 | 62% |
| 2 | b) Livestock vaccination drives | 19 | 38% |
| Total  |  | 50 |  |

|  |  |
| --- | --- |
| mean | 34.5 |
| Standard deviation | 4.94975 |

From above table it shows that 62% of people getting animal insurance scheme from the government and 38% of people get live stock vaccination drives.

From above pie chart it shows 31 people are getting animal insurance scheme.

**10.**Which of the following is a challenge in the marketing and distribution of animal products?

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **particulars** | **No of response** | **percentage** |
| **1** | a) Meeting quality standards | **37** | 74% |
| **2** | b) Increasing production efficiency | **3** | 6% |
| **3** | c) Reducing production costs | **7** | 14% |
| **4** | d) Managing on-**farm** operations | **3** | 6% |
|  | **Total** | **50** | **100%** |

|  |  |
| --- | --- |
| **mean** | **12.5** |
| **Standard deviation** | **16.4418** |

From the above table it shows 74% people are face problem in meeting the quality, 6% people are face problem increasing the production efficiency, 14% people are face problem in reducing the production cost in their animal husbandry activities and 6 plus and people are faced problem in managing on form operation.

From above pie chart it shows that 37 people surface problem in meeting the standards of the products

**11.**What is the main reason for the limited adoption of modern animal husbandry practices in villages?

|  |  |  |  |
| --- | --- | --- | --- |
| **code** | **particulars**  | **frequency** | **percentage** |
| **1** | a) Lack of awareness and education | **29** | 58% |
| **2** | b) High initial investment costs | **3** | 6% |
| **3** | c) Resistance to change | **13** | 26% |
| **4** | d) Limited access to technology | **5** | 10% |
| **Total** |  | **50** |  |

|  |  |
| --- | --- |
| **mean** | **23.5** |
| **Standard deviation** | **14.0119** |

From the above table it shows that 8% of people have lack of awareness and education in adopting the modern animal husbandry practices, 26% people face problem in resistance to change, face the problem in I initial investment cost to adopt the modern modern practices and 10% people have limited access to the technology

From above by chart it shows that are people are not have a proper education and awareness about the modern practices in the animal husbandry.

**12**.Are you taken any loan

|  |  |  |  |
| --- | --- | --- | --- |
| **code** | **particulars** | **frequency** | **percentage** |
| **1** | **Yes** | **38** | 76% |
| **2** | **no** | **12** | 24% |
| **Total** |  | **50** |  |

|  |  |
| --- | --- |
| **mean** | **31** |
| **Standard deviation** | **9.89949** |

From the above table we can see that 76% of people are taken a loan from the bank and other institution to conduct their animal husbandry activities and 24% people are not taken any loan from the banks or any other institution.

pie chart we can see that majority of people have taken a loan from the bank and other institution.

14.Is government providing sufficient Veterinary support

|  |  |  |  |
| --- | --- | --- | --- |
| **code** | **particulars** | **No of response** | **percentage** |
| **1** | **Yes** | **22** | 44% |
| **2** | **no** | **28** | 56% |
|  | **Total** | **50** | 100% |

|  |  |
| --- | --- |
| **mean** | **39** |
| **Standard deviation** | **24.0416** |

From above table 44% of people getting veterinary support from the government and 56% are not getting any veterinary service.

From above pie chart it shows majority of people are not veterinary service from government.

**15.Are you faced financial challenge in sustaining your animal husbandry**

|  |  |  |  |
| --- | --- | --- | --- |
| **code** | **particulars** | **No of response** | **percentage** |
| **1** | strongly dis agree  | **0** | 0% |
| **2** | disagree | **4** | 8% |
| **3** | netural | **6** | 12% |
| **4** | agree | **38** | 76% |
| **5** | strongly agree | **2** | 4% |
|  | **Total** | **50** |  |

|  |  |
| --- | --- |
| **mean** | **37.6** |
| **Standard deviation** | **64.2713** |

From the above graph it shows that 38 people are agree that they face financial challenge in sustaining animal husbandry activities. Only 4 people are disagree that their not face any financial challenge.

**17.**Training and education opportunities in animal husbandry are accessible

|  |  |  |  |
| --- | --- | --- | --- |
| **code** | **particulars** | **frequency** | **percentage** |
| **1** | strongly dis agree  | 15 | 30% |
| **2** | disagree | **5** | 10% |
| **3** | netural | **5** | 10% |
| **4** | agree | **25** | 50% |
| **5** | strongly agree | **0** | 0% |
| **Total** |  | **50** |  |

|  |  |
| --- | --- |
| **mean** | **28** |
| **Standard deviation** | **40.7124** |

From the above table 50% of people agree that training and opportunities are accessible. Whereas 10% people are disagree that they are not accessible to any training opportunities

From above by chat we can see that 25 people are accessible to training and education facilities from the government.

**18.**please rate the private veterinary service

|  |  |  |  |
| --- | --- | --- | --- |
| **code** | **particulars** | **frequency** | **percentage** |
| **1** | strongly dis agree  | 2 | 4% |
| **2** | disagree | **2** | 4% |
| **3** | netural | **6** | 12% |
| **4** | agree | **27** | 54% |
| **5** | strongly agree | **13** | 26% |
| **Total** |  | **50** |  |

|  |  |
| --- | --- |
| **mean** | **39.4** |
| **Standard deviation** | **46.01956** |

From the above table it shows 54% people are agree with the rate of the private veterinary service, 4% are not satisfied with the private veterinary service.

From above pie chart 27 people are agree (satisficed) with private veterinary service,

**CHAPTER 4**

**FINDINGS AND SUGGESTIONS**

**FINDINGS**

This research is conducted to find the problems facing in animal husbandry. The study revealed that all the farmers are facing so many problems while doing the animal husbandry are:

* The survey revealed that in Tumkur majority of people (76%) engaging in cattle farming.
* The survey revealed that primary challenges in animal husbandry is related to disease management.
* From the above study found that the 54% people are face problem in identifying and diagnosing the disease.
* Majority of people face water usage and pollution environment aspect problem.
* 62% of people are get animal insurance scheme from the government.
* 74% of people face in challenge in marketing and distributing of their animal products.
* 56% of people are not get sufficient veterinary support from the government.

**SUGGESTIONS**

To over come from the problems here is some suggestions can help to improve and sustainability in animal husbandry :

* By giving adequate nutrition and balanced diet with nutrients they can attain sustainability in animal husbandry.
* Proper veterinary can plays an important role in animal husbandry.
* By providing proper shelter for animals to protect from the extreme weather condition.
* Financial support from the government may help them to enhance their growth in animal farming.
* proper shelter and cleaning facilities to the domestic animals.
* Food helps in maintaining normal metabolic activities of the body in the animal.
* In some areas govt giving livestock vaccination drive it must be reached to every one.

Proper implication of schemes by govt helps to improve the efficiency in the livestock management. Better training must be provided and implication of modern practice is needed in animal husbandry.

**CONCLUSION**

From the above study I conclude that presently animal husbandry is suffering from the some many challenges.In Tumkur rural areas all most majority of people engage in the animal husbandry. Livestock management is a complex and challenging task that requires careful planning and execution.

Improving animal husbandry practices is essential for the well-being of animals and sustainability in animal farming.

By focusing on the sanitation,shelter,feed quality,better veterinary service enrich the production in animal husbandry.

From study we can see that most of people face problem in the disease management for this proper health service must needed but in some region the government not providing opting to private doctors may not cost effective.

So, proper support Government (financial support, training and veterinary) may help the people to opt better practice in their animal husbandry activities.

the Indian livestock sector has enormous potential for growth. However, it requires a comprehensive approach that addresses the challenges it faces. The suggestions can help mitigate these challenges and improve productivity in the sector.